

IN THE CLAIMS

Please cancel Claims 18-20 without prejudice or disclaimer.

Please add the following new Claims:

New Claim 21. An integrated circuit, comprising:

a substrate having top channels for addition of a circuit material, the top channels having sides extending to a plane defining a top surface of the substrate and a bottom beneath the plane;

a die mounted to the substrate;

AI means mounted to the substrate for connecting the die to external circuits; and

means deposited within the channels for forming an electrical connection between the die and the means mounted to the substrate.

New Claim 22. The integrated circuit of Claim 1, wherein the substrate further has bottom channels having sides extending to a bottom plane defining a bottom surface of the substrate and a top beneath the bottom plane, and wherein the circuit material is further deposited within the bottom channels.

New Claim 23. The integrated circuit of Claim 22, wherein the substrate is an injection molded substrate.

New Claim 24. The integrated circuit of Claim 23, wherein the circuit material connects circuit material within top channels and circuit material within bottom channels through molded voids in the injection molded substrate.

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New Claim 25. The integrated circuit of Claim 23, further comprising at least one other die mounted on the substrate, and wherein the circuit material further forms electrical connections between the die and the at least one other die.

New Claim 26. The integrated circuit of Claim 23, wherein the substrate and the circuit material form die connection pads for solder-ball mounting of the die to the substrate.

New Claim 27. The integrated circuit of Claim 23, wherein the circuit material forms wire bond pads for attaching wire-bond connections from the pad.

CLEAN VERSION OF NEW CLAIMS

Claim 21. An integrated circuit, comprising:

a substrate having top channels for addition of a circuit material, the top channels having sides extending to a plane defining a top surface of the substrate and a bottom beneath the plane;

a die mounted to the substrate;

means mounted to the substrate for connecting the die to external circuits; and

means deposited within the channels for forming an electrical connection between the die and the means mounted to the substrate.

Claim 22. The integrated circuit of Claim 1, wherein the substrate further has bottom channels having sides extending to a bottom plane defining a bottom surface of the substrate and a top beneath the bottom plane, and wherein the circuit material is further deposited within the bottom channels.

Claim 23. The integrated circuit of Claim 22, wherein the substrate is an injection molded substrate.

Claim 24. The integrated circuit of Claim 23, wherein the circuit material connects circuit material within top channels and circuit material within bottom channels through molded voids in the injection molded substrate.

Claim 25. The integrated circuit of Claim 23, further comprising at least one other die mounted on the substrate, and wherein the circuit material further forms electrical connections between the die and the at least one other die.

Claim 26. The integrated circuit of Claim 23, wherein the substrate and the circuit material form die connection pads for solder-ball mounting of the die to the substrate.

Claim 27. The integrated circuit of Claim 23, wherein the circuit material forms wire bond pads for attaching wire-bond connections from the pad.